

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/415,815	LINDNER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dwin M. Craig	2123	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/21/2005.
2. ☒ The allowed claim(s) is/are 39, 41 & 43-50.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

**DETAILED ACTION**

**And**

**EXAMINER'S REASONS FOR ALLOWANCE**

1. Claims 39, 41 and 43-50 are allowed.

*Examiner's Reasons for Allowance*

2. The following is an Examiner's statement of reasons for allowance: The Applicants' claims are allowed for at least the reasons listed below.

2.1 As regards independent claim 49, the following limitations, in combination with other limitations are neither anticipated nor made obvious by the prior art, *"said software model is loadable via the bus in the central control unit, and the central control unit being provided with the parameters, functionalities and programs of the field device with which said software apparatus model is associated, so that the field device with which said software apparatus model is associated can be simulated in the central control unit."* The combination of the Applicants' expressly claimed limitations and arguments presented in the 11/21/2005 responses have been, in combination, persuasive and the Examiner withdraws the earlier prior art rejections.

2.2 As regards independent claim 50, the following limitations, in combination with other limitations, are neither anticipated nor made obvious by the prior art, *"the software of each apparatus being loadable into said central control unit so that the operation of the plant can be simulated by testing all parameters and functionalities in said software."* The combination of the Applicants' expressly claimed limitations and arguments presented in the 11/21/2005 responses have been, in combination, persuasive and the Examiner withdraws the earlier prior art rejections.

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**2.3** As regards independent claim 44 the following limitations, in combination with other limitations, are neither anticipated nor made obvious by the prior art, *“loading the software of the apparatuses to be employed in the plant into the central control unit; and simulating the operation of the plant by including all parameters and functionalities contained in the software by means of a software program sequence in the control unit.”* The combination of the Applicants’ expressly claimed limitations and arguments presented in the 11/21/2005 responses have been, in combination, persuasive and the Examiner withdraws the earlier prior art rejections.

**2.4** As regards independent claim 46 the following limitations, in combination with other limitations, are neither anticipated nor made obvious by the prior art, *“means memorizing a software, said software being a specification of said at least one apparatus containing the mimic image of said at least one apparatus including parameters, functionalities and programs of said at least one apparatus, said software providing said control unit with said specification of said at least one apparatus.”* The combination of the Applicants’ expressly claimed limitations and arguments presented in the 11/21/2005 responses have been, in combination, persuasive and the Examiner withdraws the earlier prior art rejections.

**2.5** Dependent claims 39, 41, 43, 45, 47 & 48 are allowed for at least the reason that they depend upon an allowed base claim.

**2.6** Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### *Conclusion*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 5,436,855 discloses a method of simulating an industrial process using functional models (Abstract, Figures 1 & 2, Col. 1 lines 50-67 and Col. 2 lines 1-39).

"Bridging the gap: Transferring logic from a simulation into an actual system controller" 1988 Winter Simulation Conference, discloses taking the results of a simulation and programming a controller for an industrial process, pages 583-590.

"Real-Time Control of a Manufacturing Cell Using Knowledge-based Simulation" 1991 Winter Simulation Conference, discloses method of simulating the cells in a manufacturing tract, pages 251-260.

"Towards a Realtime Knowledge-Based Simulation System for Diagnosing Machine Tool Failure", 1990 Winter Simulation Conference, discloses methods of modeling modules interconnected in a simulation of an industrial system, pages 603-608.

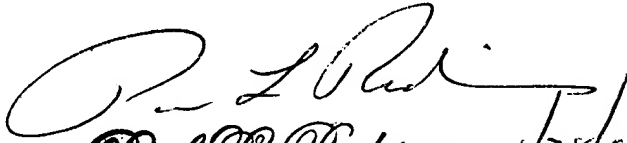
3.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC

  
Paul L. Rodriguez 1/28/06  
Primary Examiner  
Art Unit 2125